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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael T. Costello

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10/24/2006

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EXAMINER

GOLOBOY, JAMES C

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/800,288	<b>Applicant(s)</b> COSTELLO ET AL.	
	<b>Examiner</b> James Goloboy	<b>Art Unit</b> 1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/12/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Csikos (GB Pat. App. No. 2,193,972 A)

Csikos, in the abstract, discloses a metalworking fluid. On page 2 lines 30-31, Csikos discloses antioxidant and biocide additives for the metalworking fluid, forming the composition recited in Claim 1. Claim 12 is also anticipated, as the composition of Csikos is necessarily formed by adding the biocide and antioxidant to a metalworking fluid.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2-3, 6-7, 13-14, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Emert (U.S. Pat. No. 5,498,809)

The discussion of Csikos in paragraph 2 above is incorporated here by reference. Csikos discloses a metalworking fluid containing an antioxidant, but does not disclose the specific types of antioxidants in Claims 2-3 and 6-7.

Emert, in column 75, discloses antioxidants for use in a lubricating composition. In column 75 line 1, Emert teaches alkylated diphenylamines, as recited in Claim 2. In column 75 lines 10-34, Emert teaches alkylated phenylenediamine antioxidants, as recited in Claim 2, including many of the specific antioxidants recited in Claim 3. In column 70 lines 59-63, Emert shows hindered phenolic antioxidants, as recited in Claim 6, including all of those recited in Claim 7. The analogous method claims 13-14 and 17-18 are also met, as preparing a lubricant composition containing the antioxidant additives must involve the step of adding the additives to the composition.

It would have been obvious to one of ordinary skill in the art to use the antioxidants taught by Emert in the lubricant of Csikos to inhibit the deterioration of mineral oils, as taught in column 70 lines 43-47 of Emert.

7. Claims 4-5 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Crompton Corporation

([http://www.cromptoncorp.com/servlet/ContentServer?pagename=Crompton/ck\\_article/pressrelease&c=ck\\_article&cid=1042056763595&type=whatsnew](http://www.cromptoncorp.com/servlet/ContentServer?pagename=Crompton/ck_article/pressrelease&c=ck_article&cid=1042056763595&type=whatsnew) and [http://www.cromptoncorp.com/servlet/ContentServer?pagename=ck/pressrelease&c=ck\\_article&cid=1003866980424&p=984583117820&type=whatsnew](http://www.cromptoncorp.com/servlet/ContentServer?pagename=ck/pressrelease&c=ck_article&cid=1003866980424&p=984583117820&type=whatsnew)).

The discussion of Csikos in paragraph 2 above is incorporated here by reference. Csikos discloses a metalworking fluid containing an antioxidant, but does not disclose the specific types of antioxidants in 4-5 and 15-16.

The first Crompton Corporation press release ([http://www.cromptoncorp.com/servlet/ContentServer?pagename=Crompton/ck\\_article/pressrelease&c=ck\\_article&cid=1042056763595&type=whatsnew](http://www.cromptoncorp.com/servlet/ContentServer?pagename=Crompton/ck_article/pressrelease&c=ck_article&cid=1042056763595&type=whatsnew)), which is dated January 7, 2003 and therefore qualifies as prior art under 35 USC 102(b), discloses Naugalube 438L (mono-, di-, and tri-nonylated diphenylamine) and Naugalube 640 (butylated(30%) octylated(24%) diphenylamine) as antioxidants for use in lubricating compositions, as recited in Claims 4 and 5. The second Crompton Corporation press release

([http://www.cromptoncorp.com/servlet/ContentServer?pagename=ck/pressrelease&c=ck\\_article&cid=1003866980424&p=984583117820&type=whatsnew](http://www.cromptoncorp.com/servlet/ContentServer?pagename=ck/pressrelease&c=ck_article&cid=1003866980424&p=984583117820&type=whatsnew)), dated October 30, 2001, teaches Naugalube APAN, an octylated phenyl- $\alpha$ -naphthylamine as recited in Claim 4, as an antioxidant additive for lubricant compositions. The analogous method

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claims 15-16 are also met, as preparing a lubricant composition containing the antioxidant additive must involve the step of adding the additive to the composition.

It would have been obvious to one of ordinary skill in the art to use the antioxidants taught by Crompton Corporation in the lubricant of Csikos to prevent the premature degradation of the composition.

8. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Calabrese (U.S. Pat. No. 6,348,514).

The discussion of Csikos in paragraph 2 above is incorporated here by reference. Csikos discloses a metalworking fluid containing an antioxidant, but does not disclose the specific types of antioxidants in Claims 4 and 15.

Calabrese, in column 9 lines 32-35, teaches 3,5-di-t-butyl-4-hydroxy-hydrocinnamic acid, C7-C9 branched alkyl ester, as an antioxidant as recited in Claim 4. The analogous method Claim 15 is also met, as preparing a lubricant composition containing the antioxidant additive must involve the step of adding the additive to the composition.

It would have been obvious to one of ordinary skill in the art to use the antioxidant taught by Calabrese in the lubricant of Csikos to prevent the premature degradation of the composition.

9. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Emert as applied to claim 6 above, and further in view of Yamazaki (U.S. Pat. No. 6,075,065).

The discussion of Csikos in view of Emert in paragraph 6 above is incorporated here by reference. The combination of Csikos in view of Emert discloses hindered phenolic antioxidants, but not the specific antioxidants recited in Claim 8.

Yamazaki, in column 14 lines 12-27, teaches hindered phenolic antioxidants, and in column 14 lines 14-15 specifically teaches 2,6-di-t-butyl hydroxytoluene as an antioxidant, as recited in Claim 8. The analogous method claim 19 is also met, as preparing a lubricant composition containing the antioxidant additive must involve the step of adding the additive to the composition.

It would have been obvious to one of ordinary skill in the art to use the 2,6-di-t-butyl hydroxytoluene antioxidant taught by Yamazaki as the hindered phenolic antioxidant in the composition of Csikos and Emert in order to inhibit the deterioration of mineral oils, as taught in column 70 lines 43-47 of Emert.

10. Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Emert as applied to claim 6 above, and further in view of McEntee (U.S. Pat. No. 4,624,679).

The discussion of Csikos in view of Emert in paragraph 6 above is incorporated here by reference. The combination of Csikos in view of Emert discloses hindered phenolic antioxidants, but not the specific antioxidants recited in Claim 8.

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McEntee, from columns 4-40, teaches many antioxidant compounds. In column 19 McEntee discloses the antioxidant sold under the trade name "Irganox 259", and teaches that Irganox 259 is thiodiethylene-bis(3,5-di-t-butyl-4-hydroxyhydrocinnamate), as recited in Claim 8. The analogous method claim 19 is also met, as preparing a lubricant composition containing the antioxidant additive must involve the step of adding the additive to the composition.

It would have been obvious to one of ordinary skill in the art to use the is thiodiethylene-bis(3,5-di-t-butyl-4-hydroxyhydrocinnamate) antioxidant taught by McEntee as the hindered phenolic antioxidant in the composition of Csikos and Emert in order to inhibit the deterioration of mineral oils, as taught in column 70 lines 43-47 of Emert, and because the antioxidant works particularly well in combination with a biocide, as taught in the abstract of McEntee.

11. Claims 9-10 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Bennett (U.S. Pat. No. 4,925,582).

The discussion of Csikos in paragraph 2 above is incorporated here by reference. Csikos discloses a metalworking fluid containing a biocide, but does not disclose the specific biocides recited in Claims 9-10.

Bennett, in column 3 lines 20-31, teaches a group of biocides for use in an "industrial water based fluid", including all the types of biocides recited in Claim 9, and all of the specific biocides of Claim 10 except 1,3,5-tris(2-hydroxyethyl)-S-triazine. From column 2 lines 63 through column 3 line 3, Bennett notes that the "industrial water



based fluid" may be a metalworking fluid. The analogous method claims 20-21 are also met, as preparing a metalworking fluid containing the biocide additives must involve the step of adding the additives to the fluid.

It would have been obvious to one of ordinary skill in the art to use the biocides taught by Bennett in the fluid of Csikos, for the purpose of reducing or inhibiting the growth of microorganisms, as taught in column 1 lines 8-10 of Bennett.

12. Claims 9-11 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csikos in view of Fields (U.S. Pat. No. 5,981,632).

The discussion of Csikos in paragraph 2 above is incorporated here by reference. Csikos discloses a metalworking fluid containing a biocide, but does not disclose the specific biocides recited in Claims 9-11.

In column 5 lines 62-67, Fields discloses 1,3,5-tris(2-hydroxyethyl)-S-triazine as a biocide in a water-based emulsion, as recited in Claims 10-11. More generally, this biocide is a triazine, as recited in Claim 9. The analogous method claims 20-22 are also met, as preparing a composition containing the biocide additives must involve the step of adding the additives to the composition.

It would have been obvious to one of ordinary skill in the art to use the biocide taught by Fields in the fluid of Csikos, for the purpose of reducing or inhibiting the growth of bacteria and microorganisms, as taught in column 5 lines 55-58 of Fields.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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